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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/675,166

09/30/2003

John K. Walton

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EXAMINER

SORRELL, ERON J

ART UNIT

PAPER NUMBER

2182

MAIL DATE

DELIVERY MODE

03/13/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/675,166	<b>Applicant(s)</b> WALTON ET AL.	
	<b>Examiner</b> ERON J. SORRELL	<b>Art Unit</b> 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 5 and 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed 12/04/07 have been fully considered but they are not persuasive. The applicant argues:

1) "Thus, as pointed out in the claims, each one of the input/output sections includes a queue for outbound information being returned to the **SOURCE** (SUCH AS THE HOST COMPUTER/SERVER OR DISK DRIVES, as the case may be) through such **originating one of the directors** after being processed by the microprocessor of such **remote one of the directors**. Thus, it is clear that **although the REMOTE director does the processing of the information, the processed information is returned to the SOURCE through, not the remote director, but through the ORIGINATING director. This is not described in Calvinac (U. S. Patent No. 6,044,079) (emphasis in original).**"

2. The Examiner does not rely on Calvinac to teach the limitation argued by the applicant. The Examiner relies on Pierson to teach the indicated limitation (see Office Action mailed 8/13/07, paragraph 8).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Calvignac et al. (U.S. Patent No. 6,044,079 hereinafter "Calvignac") in view of Pierson (U.S. Pub. No. 2003/0048781) and further in view of Zhao et al. (U.S. Pub. No. 2005/0147034 hereinafter "Zhao").

5. Referring to claim 5, Calvignac teaches a queuing system comprising:

a plurality of interconnected directors (items 86, figure 5), each one of the directors having:

an input/output interface section (item 94, figure 5) receiving information from a source thereof and returning information to such source (see lines 50-65 of column 8); and,

a microprocessor processing information sent thereto from a remote one of the directors, each one of the microprocessors

Art Unit: 2181

having a CPU (item 90, figure 5) and a CPU memory (item 92, figure 5) such CPU memory storing a queue for inbound information passed to such director for processing therein such information being sent to the remote director from an originating one of the directors (see lines 50-65 of column 8, note the Examiner is construing the combination of elements 90 and 92 to be the claimed microprocessor; the memory 92 stores incoming data to be processed by the processor and outgoing data processed by the processor that is ready for transmission).

Calvignac fails to teach each one of the input/output sections includes a queue for outbound information being returned to the source through such originating one of the directors after being processed by the microprocessor of such remote one of the directors.

Pierson teaches, in an analogous system, the input/output sections has a queue for outbound information (see paragraph 45).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Calvignac with the above Pierson. One of ordinary skill in the art would have been motivated to make such modification in order to allow data to accumulate before sending

the data to its destination improving the data transfer processing as suggested by Pierson (see paragraph 45).

The combination of Calvignac and Pierson fails to teach that each one of the directors includes a translation table, such table storing at a location thereof corresponding to each one of the remote directors a producer index for the queue of such remote director and a consumer index for such one of the remote directors and an index into the table is a function of the receiving information in a queue entry in the queue and derives the location of the source from the table.

Zhao teaches, in an analogous switching system, the directors including a translation table storing a producer index and a consumer index for the remote director (see figure 3, note the head and tail pointers correspond to applicant's producer and consumer index) and an index into the table is a function of the receiving information and derives a location of the source from the table (see paragraph 37, note the FLID comprises the source address).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Calvignac and Zhao with the above teachings of Zhao. One of ordinary skill in the art would have been motivated to make such modification in order to improve the

Art Unit: 2181

scheduling of the data through the system as suggested by Zhao (see paragraph 35).

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Calvignac in view of Pierson.

7. Referring to claim 9, Calvignac teaches a queuing system comprising:

a plurality of interconnected directors (items 86, figure 5), each one of the directors having:

an input/output interface section (item 94, figure 5) receiving information from a source thereof and returning information to such source (see lines 50-65 of column 8); and,

a microprocessor processing information sent thereto from a remote one of the directors, each one of the microprocessors having a CPU (item 90, figure 5) and a CPU memory (item 92, figure 5) such CPU memory storing a queue for inbound information passed to such director for processing therein such information being sent to the remote director from an originating one of the directors (see lines 50-65 of column 8, note the Examiner is construing the combination of elements 90 and 92 to be the claimed microprocessor; the memory 92 stores

incoming data to be processed by the processor and outgoing data processed by the processor that is ready for transmission).

Calvignac fails to teach each one of the input/output sections includes a queue for outbound information being returned to the source through such originating one of the directors after being processed by the microprocessor of such remote one of the directors.

Pierson teaches, in an analogous system, the input/output section has a queue for outbound information (see paragraph 45).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Calvignac with the above Pierson. One of ordinary skill in the art would have been motivated to make such modification in order to allow data to accumulate before sending the data to its destination improving the data transfer processing as suggested by Pierson (see paragraph 45).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERON J. SORRELL whose telephone number is (571)272-4160. The examiner can normally be reached on Monday-Friday 8:00AM - 4:30PM.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alford Kindred can be reached on 571-272-4037. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EJS  
February 26, 2008

/Alford W. Kindred/  
Supervisory Patent Examiner, Art Unit 2163